

Remarks

Claims 5-8 and 12 were pending in this application. Applicant has amended claims 5 and 12 and has added new claims 18-21. Accordingly, claims 5-8, 12, 18-21 are currently pending.

Based on the amendments above and the remarks below, Applicant respectfully request reconsideration and passage to issue.

The Examiner rejected claims 5-8 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Roberts (U.S. Patent No. 5,005,009) in view of Ansaldi et al. (U.S. Patent No. 5,343,206); claims 5-8 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Roberts in view of Kadomukai et al. (JP 402227340); and claims 5 and 12 under 35 U.S.C. § 102(e) as being anticipated by Ejiri et al. (U.S. Patent No. 5,969,969).

Claims 5 and 12 were amended to claim “controlling the contrast of the heads-up display relative to an environmental image.”

Regarding the obviousness rejections, Roberts does not provide any motivation for controlling the contrast of the heads-up display relative to an environmental image. Without any motivation to modify the reference, there can be no prima facie case of obviousness. *ACS Hospital Systems, Inc. v. Monteffiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). “There are three possible sources of motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998). None are present in this case.

Further, the Examiner must make particular findings as to the reasons for combining the prior art. *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In this case, the particular findings are insufficient to form a basis for combining the art. Regarding the objections based on Roberts in view of Ansaldi, the Examiner stated:

It would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a head up display 34 taught by Ansaldi in a head up display of Roberts' system because the condition of the road may be detected by means of suitable type adhesion sensors.

Office Action mailed March 14, 2002, ¶¶ 4,6.

The condition of the road is not a concern or problem encountered in Roberts. Roberts is concerned with "matching the peak reflected or emitted frequencies of light produced by the instrument with a predetermined tint field" and "increas[ing] the primary image contrast relative to the ambient background light by reducing the amount of in-band light which is readily apparent on the background." (Roberts, col. 7, ll. 31-34, 45-48.) Further, there is nothing in Ansaldi that suggests that the adhesion sensors are environmental images or include optical detectors. (Ansaldi, col. 12, ll. 63-65.)

Regarding the objections of Roberts in view of Kadomukai, the Examiner stated:

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the controlling contrast taught by Kadomukai at al in the HUP [sic] of Roberts because this would allow the driver to easily distinguish the obstacle.

Office Action mailed March 14, 2002, ¶ 8.

Distinguishing obstacles is neither a problem nor concern of Roberts. As discussed above, Roberts is concerned with "matching the peak reflected or emitted frequencies of light produced by the instrument with a predetermined tint field" and "increas[ing] the primary image contrast relative to the ambient background light by reducing the amount of in-band light which is readily apparent on the background." (Roberts, col. 7, ll. 31-34, 45-48.)

Accordingly, the Examiner has failed to show any motivation to combine the prior art references and therefore has failed to make a prima facie showing of obviousness. Claims 5 and 12, and all claims that depend therefrom, are therefore patentable over the prior art.

Further, Ansaldi does not “control the contrast of the display relative to an environmental image.” In Ansaldi, “an object will be coloured red or yellow depending on its distance from the vehicle.” (Ansaldi, col. 10, lls. 41-43.) In contrast, in Applicant’s invention, “[i]f a large red truck is in front of the same vehicle, the control may select blue for the display.” (Application, p. 2, lls. 8-9.)

Additionally, the “[r]eferences relied on to support a rejection under 35 U.S.C. § 103 must provide an enabling disclosure, *i.e.*, they must place the claimed invention in the possession of the public.” (Application of Payne, 606 F.2d 303, 314 (CCPA 1979).) Kadomukai is not an enabling disclosure. Kadomukai is a Japanese patent written in Japanese. The Kadomukai abstract referred to by the Examiner is a rough English translation and merely provides a vague and general idea. The abstract does not place the claimed invention in the possession of the public.

Regarding claim 7, the prior art does not teach changing the pattern of the displayed information to control the contrast of the heads-up display.

Regarding claim 8, the Examiner stated that “Kadomukai et al teaches a signal processing part 1 for changing and selecting the display portion of the symbol to such a position that is large in the contrast colors between the symbol and the background color.” (*emphasis added*) (Office Action, March 14, 2002, paragraph 9.) The Examiner has not shown how Kadomukai’s changing positions makes Applicant’s invention relating to changing colors obvious. Ansaldi does not teach, describe, or suggest changing colors of the display relative to the environmental image.

Regarding the § 102(e) rejection of claims 5 and 12 based on Ejiri, the Examiner improperly combined Ejiri’s two separate systems which even if combined do not describe each and every element of Applicant’s invention as claimed. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236; 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). While Ejiri does disclose a camera, the shape information of the target and the displayed circles referred to by

the Examiner comes from proximity sensors 125, not the camera. The proximity sensors merely detect the presence of an object and do not provide additional information. The white circles or black circles 125a, 125b are not in contrast relative to an environmental image. Figures 34 and 35 are overhead images of the car that do not show environmental features approaching the vehicle captured by an optical detector. Further, Ejiri does not teach that the overhead image and the circles change relative to the background.

Accordingly, Ejiri does not teach "an arrangement for controlling the heads-up display relative to an environmental image approaching the moving vehicle wherein the arrangement includes an optical detector for capturing the image of the environment approaching the vehicle and a control coupled to the optical detector for controlling the contrast of the heads-up display in response to the environmental image approaching the moving vehicle" and claims 5 and 12 are patentable over Ejiri.

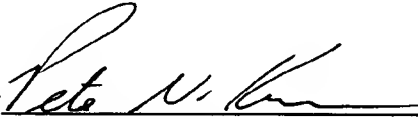
Applicant has also added new independent claims 18 to 21 which he contends are patentable over the prior art for the same reasons discussed above.

Applicant believes that he has fully responded to the Office Action and contends that all claims are in condition for allowance and respectfully requests passage to issue.

Applicant has added four new independent claims for a total of six independent claims. A check for \$252 is enclosed for the additional claims. Please charge any additional fees or credit any overpayment as a result of the filing of this paper to our Deposit Account No. 02-3978, for which purpose a duplicate of this paper is enclosed.

If the Examiner believes that a telephone conference would further the prosecution of this case, the Examiner is encouraged to contact the Applicant's attorney at the Examiner's convenience.

Respectfully submitted,

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Attachment



VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please replace claims 5 and 12 and add new claims 18, 19, 20, ~~and 21 as shown~~
below.

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5. (Amended) A vehicle heads-up display system comprising:
a source for providing a heads-up display onto a windshield of a moving vehicle;

and

an arrangement for controlling the contrast of the heads-up display relative to an environmental image approaching the moving vehicle wherein the arrangement includes an optical detector for capturing the image of the environment approaching the vehicle and a control coupled to the optical detector for controlling the contrast of the heads-up display in response to the environmental image approaching the moving vehicle.

12. (Amended) A method of providing a heads-up display comprising the steps of:

(a) providing a system for directing a heads-up display onto the windshield of a moving vehicle;

(b) directing a heads-up display onto the vehicle windshield; and

(c) controlling the contrast of the heads-up display relative to an environmental image approaching the moving vehicle wherein the step of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads-up display in response to the environmental image captured.

18. (New) A vehicle heads-up display system comprising:

a source for providing a heads-up display onto a windshield of a moving vehicle;

and

an arrangement for controlling the contrast of the heads-up display relative to an environmental image approaching the moving vehicle wherein the arrangement includes an optical detector for capturing the image of the environment approaching the vehicle and a

control coupled to the optical detector for controlling the contrast of the heads-up display in response to the environmental image approaching the moving vehicle; and

wherein the control selects an appropriate pattern for the heads-up display dependent upon said captured image.

19. (New) A vehicle heads-up display system comprising:

a source for providing a heads-up display onto a windshield of a moving vehicle;

and

an arrangement for controlling the contrast of the heads-up display relative to an environmental image approaching the moving vehicle wherein the arrangement includes an optical detector for capturing the image of the environment approaching the vehicle and a control coupled to the optical detector for controlling the contrast of the heads-up display in response to the environmental image approaching the moving vehicle; and

wherein the control selects an appropriate color for the heads-up display dependent upon said captured image.

20. (New) A method of providing a heads-up display comprising the steps of:

(a) providing a system for directing a heads-up display onto the windshield of a moving vehicle;

(b) directing a heads-up display onto the vehicle windshield; and

(c) controlling the contrast of the heads-up display relative to an environmental image approaching the moving vehicle wherein the steps of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads-up display in response to the environmental image captured and selecting an appropriate pattern for the heads-up display dependent upon said captured image.

21. (New) A method of providing a heads-up display comprising the steps of:

(a) providing a system for directing a heads-up display onto the windshield of a moving vehicle;

(b) directing a heads-up display onto the vehicle windshield; and

(c) controlling the contrast of the heads-up display relative to an environmental image approaching the moving vehicle wherein the steps of controlling includes the step of capturing the image of the environment approaching the moving vehicle and controlling the contrast of the heads-up display in response to the environmental image captured and selecting an appropriate color for the heads-up display dependent upon said captured image.